



Journal of International Women's Studies

Volume 18 | Issue 4

Article 2

Aug-2017

Farming Cooperatives: Opportunities and Challenges for Women Farmers in Jamaica

Amani Ishemo

Brenda Bushell

Follow this and additional works at: <http://vc.bridgew.edu/jiws>

 Part of the [Women's Studies Commons](http://vc.bridgew.edu/jiws)

Recommended Citation

Ishemo, Amani and Bushell, Brenda (2017). Farming Cooperatives: Opportunities and Challenges for Women Farmers in Jamaica. *Journal of International Women's Studies*, 18(4), 13-29.
Available at: <http://vc.bridgew.edu/jiws/vol18/iss4/2>

This item is available as part of Virtual Commons, the open-access institutional repository of Bridgewater State University, Bridgewater, Massachusetts.

Farming Cooperatives: Opportunities and Challenges for Women Farmers in Jamaica

By Amani Ishemo¹ and Brenda Bushell²

Abstract

In many respects it is Jamaican women who play a pivotal role in small-scale farming, particularly in marketing farm produce. More highly educated than men, and gender-wise, women farmers are highly self-reliant; however, their socio-economic strength is not fully capitalized through cooperative endeavors to foster productivity on their farms. This research examines women's cooperatives and the operations of women farmers in two remote rural communities using focus group discussion and targeted on-site investigation approaches. We find that over the years, small farming cooperatives are unsustainable because of their land-tenure problem, and lack of decision-making power at the grassroots level. The research suggests that the potential of women farmers in rural Jamaica has not been well utilized to foster their farming cooperatives. Crucially needed is the promotion of grassroots-based farming groupings to ensure the durability of cooperatives, as well as a multi-sector approach in agriculture, and the intensification of appropriate technological applications in all stages of farming, coupled with micro-food processing. Furthermore, a conducive environment for agricultural production and economic return requires land reform, increasing marketing opportunities, and cooperatives based on the diversification of agricultural and non-agricultural activities.

Keywords: women; Jamaica; cooperatives; small-scale farming; livelihood empowerment; focus group discussions

Introduction

The cooperative movement in Jamaica has a long history, stretching over 175 years since the abolition of slavery in 1838. As outlined in a report by the Government of Jamaica (GOJ, 2011) informal cooperatives, formed by peasant farmers at that time, were aimed at providing group action for agricultural pursuits, as well as for building networks among farmers on which

¹ Amani Ishemo is an Associate Professor in the Faculty of the Built Environment at the University of Technology, Jamaica. Dr. Ishemo has held posts as Senior Regional Planner in Tanzania and Physical Planner Specialist with the United Nations Development Program in the Eastern Caribbean. His main research interests lie in Rural Development, Disaster Management, Land Use Planning and Migration. In 2012 he was awarded The UTech President's Award for Excellence in Research. In 2010, he received The Emerald Literati Network Award for Excellence for his impressive paper on the vulnerability of urban coastal settlements in Jamaica. He received his Ph.D. in environmental management from the University of the West Indies in 2005, a Master's degree in Urban and Regional Planning from Ball State University in 1984, and a B.A. in Sociology from the University of Dar-Es-Salaam in 1980.

² Brenda Bushell is a Professor in the Department of English Language and Literature at the University of the Sacred Heart, Tokyo, Japan. She teaches courses in gender and sustainable society, as well as English for academic purposes. Her ongoing research, supported by the Japanese Ministry of Education, focuses on women entrepreneurs in Nepal and the challenges they face in the informal business sector. She holds a Master of Education from Temple University, a Master in Women's Studies from the University of Toronto, and an Honours B.A. in Health Sciences from the University of Western Ontario.

to build more formal cooperatives. The emphasis on agricultural cooperatives was mainly emphasized in the 1970s when the government was aggressively pursuing an inward development strategy for uplifting the livelihood of the majority of the population living in rural areas. However the cooperative women farmers' movement in Jamaica has been unable to gather momentum, despite its recognition in increasing agricultural productivity and fostering the livelihoods of rural farming populations.

The term cooperative refers to "an association of persons, usually of limited resources who have voluntarily joined together to achieve a common economic end through the formation of a democratically controlled business organization, making equitable contributions to the capital required and accepting a fair share of risk and benefits of undertaking" (Njoku et al., 2003, p. 97). To the contrary in Jamaica, the farmers' cooperative formation, operation, and the commitment of its members is short-lived. Cooperatives are tied to the life cycle of the projects run by donor agencies. Thus, experience has demonstrated that the life span of cooperative entities depend on the existence of resources from agencies to implement agricultural projects. Overall the benefits of farmer cooperatives are well-known. Among the benefits as outlined by Rural Agriculture Development Authority (RADA, 2009) are for optimum sharing of resources input such as fertilizer, labour and equipment, improvement of farm management, and the development of a market networking system.

As it will be noted in the proceeding sections of this paper, historically, and still today the role played by women in the development of the agricultural sector is significant. Apart from maintaining the household, planting, weeding and harvesting of crops on their farms, women play a significant role in marketing and selling of farm produce. Hence there is a growing need to strengthen the capacity of their cooperatives for increasing agricultural productivity and by implication, enhancement of their household living standards.

It should be emphasized that along with other small farmers, women farmers have suffered a prolonged inequitable land tenure system which has negatively impacted their cooperatives' farming operations. In addition, because of their multiple activities and vulnerable location of most of their farm land, especially on hilly terrain, women farmers cannot take immediate action in response to environmental hazards such as landslides and flooding (Vincent, 2007). Such hazards prove prohibitive for consistent and productive farming, and by implication, dampen the cooperative spirit.

Importantly, efforts of women cooperatives in Jamaica have not been fully assessed as very limited research attention has been given to them. Hence this paper seeks to analyze the achievements and constraints of women farmer cooperatives in rural Jamaica, and suggest ways to achieve a sustainable approach to their operations.

The predicament of the small farmers' cooperative movement in Jamaica

We would like to note that research and publications on cooperatives in Jamaica are rare. However, the cooperative role in the improvement of livelihoods of the rural population is well recognized, for example, the work of Njoku et al. (2003), Crawford (2011), and Durant-Gonzalez (1995). Based on the 2011 Cooperative Movement Report of the government of Jamaica, during the post-war period, developmental strategies were centered in rural areas but production was low. Two major problems faced the agricultural community; the acquisition of agricultural input including equipment, seeds and fertilizers, and the inability to market the produce. Thus, agricultural cooperatives were developed from these areas of need for farmers to be able to

procure their farming requisites and market much of their crops through these organizations. Based on government statistics (GOJ, 2011), there are over 100,000 farmer cooperatives in Jamaica, but over the years these cooperatives have faced many challenges for their sustainable operations. The challenges include: lack of management, particularly leadership, lack of adequate financing, poor cooperative integration, and an unwillingness to offer mutual support for the common good.

However, the major challenge as explained further in this section, is a skewed pattern of land ownership whereby small-scale farmers have continuously occupied small plots averaging 1.5 hectares, located mainly on sloping lands in the rugged interior, for example Mavis Bank, Irish Town and New Castle. A number of rural development researchers in the Caribbean such as Edwards (1961), Momsen (1987), Critchlow (1988) and Ishemo et al. (2006) have contributed significantly to the discussion of these issues.

By extension, the contemporary biophysical constraints are reminiscent of an incomplete process of emancipation, as ex-slaves were left to either move into dependent relationships with estates, or to pursue grueling freedom in Jamaica's interior, carving out small plots from largely underdeveloped hillside forests. Accordingly, 3% of the Jamaican land owners control 62% of the farmland averaging 900 hectares (Weis, 2001). The importance of this problem requires further explanation. Historically, the excessive inequity in land ownership in Jamaica has been the major cause of social discontent. Notably, the 1938 riots were the most widespread uprising in Jamaican history. The Moynes Commission, formed in the wake of the riots, concluded that the problem of land distribution represented a potential source of future unrest, and argued that an urgent reorganization of the agricultural sector was central to improving social and economic conditions (Weis, 2006 citing Stolberg 1992, p. 52). Again however, while intensified land settlements were proposed, the commission did not challenge the sacrosanct plantation institution, suggesting only that estates be diversified. This limited view of reform contributed little to small-scale farmers and caused the debilitation of cooperatives, initially poised to facilitate peasant development, as well as invigorate cooperative traditions (Weis, 2006).

The root cause of the failures of the farming cooperatives can be traced back to the late 1950s, according to Girvan, as cited in Weis (2006) when the growing authoritarianism of the plantation institution encouraged a tendency towards individualism 'dog-eat-dog-ism' and racial contempt. Prior to this, cooperative projects were initiated by the Jamaica Welfare Limited focusing on democratizing the capitalist society and combating individualism. Activities included exchanging day-for-day labour among peasant farmers, and the accumulation of collective capital for investment in social amenities and expansion of business activities. But despite these efforts at collective survival, a cultural shift towards capitalism eventually fragmented the peasant society. Imperious control by the plantation institution and a growing incidence of praedial larceny (farm theft) ultimately undermined the livelihoods of the small-scale farmers and pitted the poor against the poor (Anderson and Witter, 1994). This same situation is mirrored in the present day, where on the one hand, the colonial state manipulates the traditional cooperative system to maintain its legitimacy, and on the other hand, it consolidates the peasant sector dependency to the plantation economy, resulting in the detriment of traditional farming solutions, such as the cooperation of labour arrangements.

Gaining independence in 1962, Jamaica embarked on searching for an appropriate development policy direction for the new nation. Thus in the 1970s, the government directed its efforts towards an inward development strategy with great emphasis on rural development. Because the majority of the population was living in rural areas and engaged primarily in farming

activities, farmer cooperatives were emphasized for the government farming assistance programs as the best way to reach and benefit the farmers. Thus, peasants' access to credit, research and extension services, and the state owned Agricultural Marketing Corporation (AMC) was established to make marketing domestic production viable. Hence, agriculture was placed at the center of Jamaica's development transformation (Mandell, 1996).

However, the government's fiscal crisis together with International Monetary Fund (IMF) conditions (which came with the loans taken out in 1977 and 1978) undermined its commitment to the poor (Weis, 2006). Thus, the 1980s was characterized by the IMF and World Bank's structural adjustment of the economy, while agriculture was relegated far behind expanding tourism, export-processing and the financial services sectors, in terms of state priorities (Weis, 2006). Hence the 1970s' initiatives for the establishment of land lease programs to support peasant agriculture was short lived. It was replaced by the land distribution policy aimed at selling public land in large blocks for the promotion of non-traditional agro-export growth on large commercial farms. The emphasis was on marketing export crops to earn foreign currency. Therefore cooperatives were based primarily on sugar, cocoa and coffee farming. In other words, cooperatives were for marketing crops to overseas markets, not for enhancement of the home market, nor for home grown food sustainability of Jamaica. In this regard the cooperatives did not touch the majority of the small farmers producing mixed crops (Pickard, 1991).

In the 1990s the Rural Agricultural Development Authority (RADA) was established with the mandate to reverse the lost initiatives of the 1970s. As a result, for the past three decades, RADA has been the main government agency in the promotion of agricultural development with an emphasis on small scale farming. Its mission is to promote agricultural development through extension services to small farmers. In order to be effective in service delivery, RADA embarked on the formation of farm cooperatives throughout rural Jamaica.

In summary, with reference to the International Fund for Agriculture Development (IFAD, 2011) and Inter-American Institute for Cooperation on Agriculture (IICA, 2007) it is important to note that small farm cooperatives did not evolve as a result of the perceived needs of the people. Agriculture cooperatives were mainly promoted as part of the government programme rather than organizations that could assist to develop the sector. These reports argue that the individualistic behavior of the agricultural producers has been a cultural constraint to the development of these organizations. It is a point which echoes similar statements in the works of Critchlow (1988) and Weis (2006). Hence, the foregoing account demonstrates that the cooperative movement has not had a successful history in Jamaica.

The socio-economic attributes of women farmers in Jamaica

For the purpose of clarity on women farmer cooperatives, we find it useful to first explain the socio-economic status of Jamaican women. The status of Jamaican women and indeed in most of the Caribbean is unique compared to other developing regions of the world. For our understanding of the issue, the work of Momsen (1993) is instructive. She argues that the transshipment of men and women from Africa under slavery, and the bonded or indentured migration of Asian workers offered women release from patriarchal control of individual men within their own household. In reality, women were similar to men in the eyes of slave owners. Most women immigrants came to the Caribbean to be plantation workers, not housewives, and their labour contributed to the development of the European industrial capital (Momsen, 1993).

In addition to their position as peasant farmers, women continued to play an important role in the agrarian labour force, as they did in the days of slavery (Momsen, 1988). Many Caribbean women continued to resist formal marriage because of the familial patriarchal ideology that became embedded in the society (Massiah, 1986; Smith, 1996). In addition, the early migration of men seeking labor, leaving women as heads of households led into the development of the matrifocal household structure (Griffith, 1998). The occurrence of migration by men in the interest of remittances has increased over the past several decades (de Haas, 2007) and this fact, coupled with increasing access to education for women in Jamaica, has resulted in their greater autonomy and personal freedom. As of 2014, female adult literacy rate reached 91% (Campbell, 2014). This trend of women's dominance in formal education attainment has been evident in urban, as well as in the rural farming populations (Ishemo, 2005). These factors have led to a degree of social and economic independence, which may be why today women farmers in Jamaica play an important and independent role in the agriculture sector (Momsen, 1998).

These notable achievements by women cannot conceal the other side of gender related problems in Jamaican society. In spite of the increase in women's educational attainment, they are still excluded from many upper management positions and there are high rates of domestic violence and rape, beginning with young girls at home molested by male relatives (Samms and Cholewa, 2010). Furthermore, many cases, particularly in the rural areas go unreported or are never brought to court. We cite this excerpt from Haniff (1998, p. 52) based on her interview with one of the victims from rural Jamaica:

This man who live in the area where me live, him see me live by myself and him feel now that him can stay there with me. Him a come help me with the pig and goat. Me tell him me don't need any help and him a come any way. After me see him a come regular, me say to him. Look here, if you want to help with the work you can go ahead but me don't want it and me not interested in you so you na fi feel that if you do work here you a go live with me. One day him come inside me house and him a hold on me and make himself forward. Me say no, and me push him way and him hold me down and rape me. Me fight him, but him strong and him box me in me face and kick me. Me cry and me go to police and dem take statement and him hear that me carry report on him. Him come back to my house and raped me again. Me go to the police, and them start to search for him, but him site them. Him come to my house again and burn it down and threaten to kill me. After that me get abortion because him get me pregnant. Me have to hide in a lot of places because me have no home.

Hence, it could be suggested that the prevalence of violence against women continues to contribute negatively to the level of agricultural activity in Jamaica. As Haniff (1998) accurately points out, the psychological and physical effects of violence inflicted upon women puts them in a precarious position, and their future autonomy at stake.

However, Jamaican women are strong and determined, as shown by their dominance in higglering—buying and selling of agricultural produce. The sustainability of small-scale farming cannot be realized without the dynamic marketing network of women higglers. Durant-Gonzalez (1985) emphasized that higglering is a primary role of achievement for rural women. It provides opportunities for economic participation and self-fulfillment, and at the same time for conforming to the cultural expectations of child-bearing and for meeting child-care responsibilities. That said,

it should be emphasized that the issue of higglering is complex. While it is a significant activity in the agricultural sector, it is still regarded as low status, and intersects with color/class categories of social positioning. With this social stigma attached, it is not the tertiary educated population of women interested in a stake within the productive system that are higglering, but women who are struggling to improve their livelihood, with hopes of achieving a sense of independence (Le Franc, 1996).

The reality is that all women farmers in Jamaica view farming as an extension of their domestic responsibilities. They concentrate mainly on subsistence production of food crops, and small-scale farming remains the main source of income for the majority of the rural women. Based on this reality, women farmers put in long days. The average working day including time spent in the fields, processing and marketing, adds up to approximately seven hours according to the Food and Agriculture Organization (FAO, 2011). This does not include household tasks and family responsibilities. Given the historical background and the growing contribution of women in farming, it is not surprising that today, nearly 50% of rural households in Jamaica are headed by women (Crawford, 2011). And while this matrifocality creates some space for women's leadership and decision-making (Arscott-Mills, 2001) it does not rid the household of other patterns of patriarchy, particularly with respect to domestic violence and the disciplining of children. It is for these reasons that women farmers may have welcomed the comradery and support system of other women through farming cooperatives.

Women farmer cooperatives

The role and importance of women's contributions in agriculture in the past is well established, and their further role as key stakeholders in rural development has been encouraged through women farmer cooperatives (Beckford and Campbell, 2013; IFAD, 2011; Getnet and Anullo, 2012). As stated earlier, from the 1990s, RADA was mandated by the government to provide extension services to farmers, particularly small farmers in each parish. The proposed services for women farmers include technical assistance in farming practices, training on land preparation, cultivation, post-harvest, livestock rearing, and finance management. Subsidies for fertilizers, seeds for cultivation, and for hybrid goats also became available for women through RADA. However, for smooth assistance and for few resources to benefit the majority of women, such assistance required beneficiaries to belong to a farm cooperative. But as is the case with many agriculture cooperatives in Jamaica, the lack of consistency in the operation of women farmer cooperatives has placed them in peril (GOJ, 2011).

While RADA and other international and local agencies have been active in providing assistance to women farmers through their cooperatives, support for cooperatives to be sustainable in terms of building their organizational capacity have either been weak or non-existent. Thus, most women farmer cooperatives lack a grassroots foundation, and exist only to receive assistance. It means the moment there is no assistance, the women cooperatives often become dormant. As such, they are not genuine cooperatives in terms of their establishment and management. As a result they are not sustainable, and the genuine impact of serving women farmers is limited.

Two cases studies: Portland and Guys Hill

Purpose and Method

As stated, the livelihood of women farmers in Jamaica and their contributions to the agriculture sector largely depend on the support of various agricultural extension services, which can be best accessed through women farmer cooperatives. However, not all cooperatives function effectively, and as a result, the potential for their members are compromised, and the sustainability of their cooperatives jeopardized. Therefore, the research reported in this paper aims to highlight the benefits of cooperatives for women farmers, as well as identify the key issues that prevent the successful operation of women farmer cooperatives. Additionally, the paper will reveal the specific challenges women farmers face in their agricultural pursuits, and how these challenges might be addressed through their cooperatives.

With guidance from the Rural Agriculture Development Authority staff, eighteen communities from the parish of Portland and twelve communities surrounding the Guys Hill area, which is a confluence of the parishes of St. Mary, St. Catherine and St. Ann were selected as our case studies. The parishes were chosen due to their geographical location, and also because of the large number of cooperative societies in these parishes (Fig. 1). After careful survey of the cooperatives and their members, a total of 61 women farmers were purposively selected for our study, with verbal informed consent sought from the respondents in advance. No ethical approval of research was needed because the research was non-intrusive, did not involve any ethical dilemmas, nor risk of harm to the farmers.

Focus group discussion was chosen as our research tool to allow us to gather various perspectives from the members of each cooperative represented, and also to give voice to the women. The focus groups consisted of approximately six women each, with discussions guided by 10 questions. Each focus group was recorded and data were analyzed by means of simple descriptive statistics. The participating women ranged in age from 19 to 46, with approximately two-thirds having achieved a high school education. The majority of women were married, about one-third marrying for the second time, with three being the average number of children per family. The family structure tended towards matrifocal, with husbands or partners often absent for varying lengths of time, taking residence in Kingston or other parts of the country for employment, or as migrant (seasonal) workers in Canada or the United States. Participating women had diverse farming backgrounds, some having been born into farming families, others taking up farming after marriage. For the majority of the women their main source of livelihood is farming, having a variety of agricultural activities, including small fruit plantations, vegetable and specialty crop farming, and the rearing of goats, pigs and chickens.

The research took three weeks, from May 12 to June 2, 2015. The first focus group meeting was held in Port Antonio. This meeting was attended by 40 women farmers from 19 farming communities in the parish of Portland. The second focus group meeting was conducted in Guys Hill, comprised of 21 women farmers. We then conducted field checks by visiting eight farms which were randomly chosen, belonging to the women; four in Portland and four in Guys Hill area.

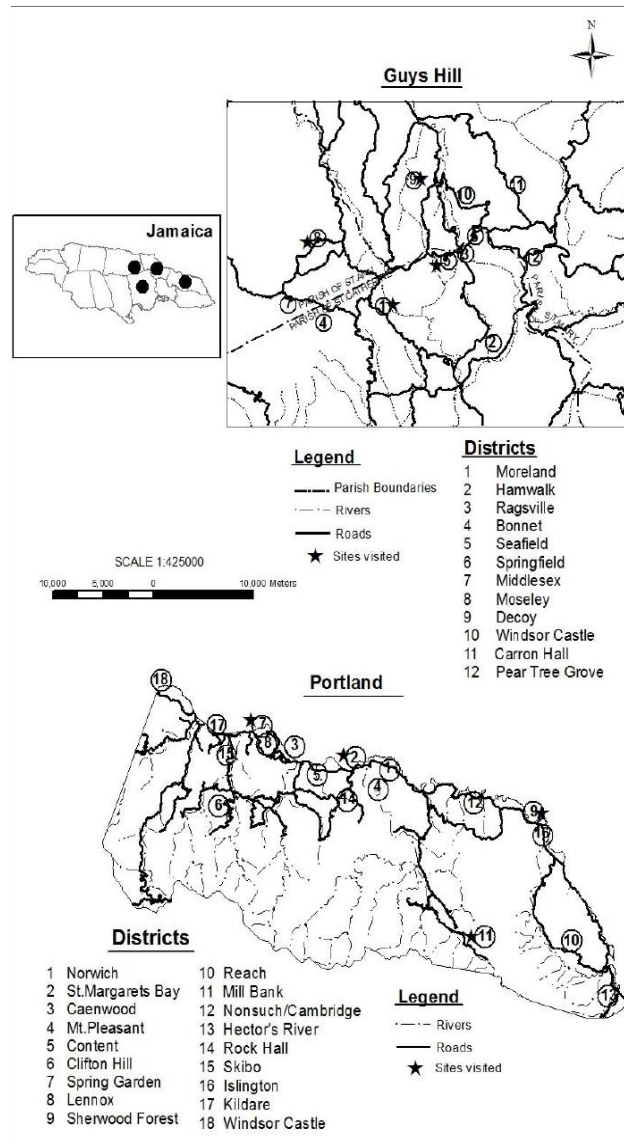


Fig.1 Location of Women Farmers Co-operatives

Source: Agriculture Land Management Division
Ministry of Agriculture and Fisheries (2015)

Women's perceptions on cooperatives: achievements and challenges

Findings from focus groups

Based on the two case studies and the field checks, we found similarities in the experiences of women in their farm cooperatives. Most of these cooperatives were established between ten and fifteen years. The purpose was to get assistance from international organizations and national government agricultural-based agencies, particularly RADA.

In terms of the benefits gained through their cooperatives, many of the women farmers emphasized the valuable knowledge they acquired through RADA, by learning farming techniques such as best practices in land preparation and planting of crops, particularly in the hilly terrain of which most of the farms are located. A participant who joined the Guys Hill Limited Cooperative when it was first established in 2002, expressed satisfaction with the support she got from RADA, "I had so many problems to start farming. My land is hilly, when the rain

comes, erosion is a big problem. RADA staff taught me about hedgerows and advised on the best crops to plant.” A woman belonging to the Sea Field Farmers Group Cooperative, operating a small mixed farm remarked, “I’m working all alone with not much money, so getting seeds and fertilizers cheaper is the most helpful. I can increase my income from raising pigs through a project with RADA and the European Union.”

Importantly too they recognized that it was not until they belonged to a cooperative that they could easily access technical assistance from RADA; it is easier for RADA to disseminate information more quickly and effectively through these cooperatives. For example in the Milbank and Cambridge areas of Portland, ginger farming cooperatives are facilitated by RADA to the extent of exporting the ginger crop. This arrangement attracted one young woman to start farming from 2013. She now farms two acres of ginger, as well as banana and plantain. On our visit to her farm in Milbank, we found thriving plots intercropped, using a drip irrigation system. And while she claimed to be satisfied with the progress she has made over the past three years, she conceded that “I couldn’t make a living with just farming, I also work at the PC Bank and together with my husband we work the farm.” The issue of sustaining income from farming, and just as importantly, sustaining crop production for domestic consumption was highlighted by the women in all focus groups, and during the field visits.

Investigation further into export and domestic crop production, we found that in some parishes, RADA and other assisting agencies tend to have an inclination towards specialized and export crops, such as coffee, cocoa and coconut, mainly due to the government’s goal in boosting the country’s foreign reserve. By taking a keen focus on specialized and export crops, agencies’ assistance places a strong outward-oriented tendency, and not on the diversification of crops for domestic consumption, which is critical for Jamaica’s future food sustainability.

While the women shared positive outcomes in terms of gaining knowledge through the support of RADA within their cooperatives, they revealed problems associated with their cooperatives’ internal organization, including a lack of consistency in membership, and access to finance. In fact, we found no specific membership requirements for any of the cooperatives we examined, aside from an interest and activity in farming. The joining fee for the cooperatives connected to our case studies is JM\$10,000 (US\$80) with a monthly fee of JM126 (US\$1). The majority of the women agreed that these fees are not high enough to impose a sense of commitment to their cooperative. One woman commented, “The monthly fee won’t do much to build the fund we need in case of emergency, so women in my cooperative don’t take the cooperative seriously.” In reality the cooperatives are regarded as somewhat temporal in their operations, and hence they feel a lack of a strong bond among cooperative members. This matter is exemplified by poor attendance at cooperative meetings, unless there is news that an agency such as RADA or USAID is in the process of assisting farmers. One woman expressed it succinctly, “When there’s a chance to get something, that’s when you’ll see many women attending the meeting and paying up their monthly dues.” The women also emphasized that because of the low membership fees and minimal savings generated by the cooperative, credit or small loans were not usually available, or even desirable, due to the multiple risks women farmers face.

Beyond the problems associated with the internal functioning of their cooperatives, the women highlighted the challenges they face in achieving a livelihood from farming. These include the quality of agricultural input, praedial larceny, getting their produce to market, the unpredictability of the market place, and the environmental factors, including the influence and impact of climate change. These human and environmental factors contribute heavily to the

weakening of the survival of the cooperatives, and are an impediment to farm investment, creating a tendency of unpredictability in the farming business for women farmers.

While many cooperatives offer seeds and other inputs at lower costs, the women cannot always depend on the quality. An example was offered by one woman farmer, “To break even I need to harvest 15 bags of Irish potatoes from 1 bag of potato seeds. But some years seed quality is poor. The seed distributors won’t guarantee good quality seeds, so, how can I have faith that my crop will be good?”

Women from both focus groups said they experienced praedial larceny in the past year. In particular, those growing more profitable produce such as apples, plantains, bananas and pineapples were often targeted. When asked why it was difficult to deter, the responses from the women were the same, “These thieves keep track of when we are in the field. They know the best time to steal our produce and livestock.” One woman explained further, “Because my land is far from where I live, it’s easy for thieves to steal my crops and animals.” The consensus being that due to distance, the women are unable to keep watch over their land, and often realize their losses long after the crimes are committed.

Getting produce to market and the unpredictability of market price were also noted as impediments. A member of the Guys Hill Limited MPO Cooperative commiserated with other women about the cost of transporting produce, “I can use the market truck to transport my produce to Kingston, but it’s very expensive. And even transporting to the local markets around the parish I have to use a taxi.” Market price fluctuations for both domestic and export produce as well makes it difficult for the women to project their income earnings and plan for investment in crops and resources.

Without exception, all the women expressed anxiety about climate change, which is predicted to become increasingly pronounced in the future, and is already hindering their income earnings. One farmer commented on the impact of recent weather patterns, “I lost my melon crop last year because of the change in weather. There was a long dry spell, longer than usual. Then there were heavy rains. The top soil washed away, and in the end, the melons weren’t worth the cost of transport to the market.” From their comments we can conclude that climate change has and will continue to have a negative impact on the livelihood of the women, and the vitality of their cooperatives.

Another important issue pointed out by the women farmers was the lack of accessibility of prime farmlands, particularly to flat lands closer to road networks. It is true that most of these farmers have family land, but most are located in the hilly interior, isolated and hard to accommodate profitable farming activity. Besson (1988) highlights the short-term aspect of family land as a scarce economic resource among living kin, therefore subordinated to its long-term symbolic role of serving generations. In summary, the peasant economy family land is thus given a residual economic role. It means that over the years, demographic change among extended families has provided the conditions on which these lands are no longer viable to sustain farming livelihoods for all persons connected to ownership of these family lands. It is for that reason women farmers acknowledged that even with rights to family land through both parental lines, it is best to be economically independent from such land, ideally through buying one’s own land, or by squatting on government or private land preferably closer to roads and markets.

Hence the impact of natural hazards and land ownership problems resulted in notable periodic population movement of rural Jamaica. Based on population census of 1970, 1982, 2001, and the work done by Ishemo (2005) there is a tendency of a high rate of population shift in the rural areas, particularly in the parishes of Portland and St. Mary. In the three inter-censal periods

cumulatively, only 31% of the population, particularly women, live in their parish of birth. This demonstrates a high rate of internal and or external population movement in Jamaica. The problems stated earlier adversely affect the livelihood of the rural population, thus stimulating population movement either within or outside the parish. Therefore, it can fairly be stated that the sustainability of women cooperatives cannot be realized under the condition of regular population shift, as farming activities depend mainly on the availability of labour. Migration hampers the availability of farm labour, from the household level, hired labour, and shared labour arrangements.

Evidence of this population shift and its impacts was confirmed through the focus groups. One woman offered this explanation, "It used to be that women farmers would group up and work on each other's farms. But since many women shift their farming to different locations these days, it's not easy to share farm labour." Further discussion yielded insight into the attitude of women farmers on shared labour. According to one veteran farmer, "The work ethic of women farmers these days is different from before. Some women don't even bother to turn up to work on other women's farms, even though they promised." This illustrates not only the change in work ethic, but also one of the ways in which the cooperative breaks down. It was also noted that male family members are sometimes unwilling to pitch in during the busy preparation and planting season as they once did. The reply from one woman's husband when asked to help out was, "It's a 'woman's time', especially having a woman prime minister." The prevailing problem of the lack of help, combined with the stress of trying to balance household chores, preparing meals, spending time with children, and farming, are gender specific constraints these women must face.

Findings from the field

During the field checks we noticed that small farmers operate their activities along the main roads and closer to town centres. These farmers originate from remote areas of the same parish, or other parishes. They indicated that they possess family land, but the land is on steep hilly terrain and poorly accessible, so most of them have chosen to take medium term leases of five to ten years on land closer to the road and markets, while others were found to be squatting on vacant land. As irrigation technology is costly, the women try to secure land close to perennial springs; however, it is not always possible. One woman farmer whose crops were bountiful, even though her land was not in close vicinity to a water source explained her irrigation method. "Because the road is full of potholes, I can usually scoop up a bit of water from puddles and water my crops." She also has a plastic tub for rainwater, but says she cannot afford a proper rainwater harvesting systems. Her example made it apparent that women farmers could greatly benefit from irrigation systems, but due to the precarious conditions related to farming, they cannot risk making the investment.

In the field we also witnessed various production activities, particularly in terms of the processing of agricultural products at the household level. Among the products, were different types of wines, jams, spices and castor oil. But the women complained that the government did not fully support nor promote their activities of agricultural diversification, particularly agro-processing. They gave an example of the Jamaica Social Investment Fund (JSIF) which wanted to provide women farmer cooperatives of Portland the equipment for processing of agricultural products, but no other government agency was willing to provide a building to facilitate such operations. This issue demonstrates the existing problem of multi-sectorial coordination on rural development. Women farmers asserted that they can do more in this regard if they can get assistance from government agencies such as the Bureau of Standards and the Scientific Research Council to facilitate the processing, approval, packaging and marketing of their produce.

Women farmers' suggestions for specific projects

Women had useful suggestions on how the cooperatives can be managed to improve their livelihoods. Importantly, they are aware of the weaknesses of cooperatives in terms of low membership, inconsistent attendance at meetings, the low monetary contributions to the organization, weak leadership, the lack of cooperation among members, and the dominance of government agencies in terms of decision-making. The majority of the women emphasized the need for leadership training and the importance of transparency within their cooperatives.

Women farmers in Portland and Guys Hill shared almost similar constructive suggestions for cooperative projects. First, because of limited financial resources among women farmers, several of the women suggested sharing equipment among cooperative members. One woman proposed the following; "We should raise the monthly fee of our cooperative, save enough cash to buy a tractor, then the members can rent it out. That's a way to build cooperation and support among our members." Second, they suggested rain water harvesting projects to facilitate irrigation, particularly to farms located a long distance from perennial streams and which frequently experience a season of long drought.

Third, all cooperatives are interested in improved goat breeding. One farmer who has experience raising goats expresses her opinion, "It takes up to a year to raise a goat for market, that's with proper feed and care. There's a good market for goat meat, so I'd like to know the best way to raise goats." To support women in this way, a cooperative could invest in a hybrid goat, then this goat could reproduce with local goats. The hybrid goats would have a heavier weight at birth, mature faster, and yield higher weight for meat. Investing in livestock as a source of income can be feasible as meat carries a standard price per pound and farmers would not be under compulsion to sell below price.

Conclusion and recommendations

This paper examined the complex issues of farming cooperatives in the context of women farmers in Jamaica. To a larger extent, the small farmer cooperatives in Jamaica do not possess the fundamental aspects to maintain viability. Their formation and operations are opportunistic, and they are lacking in organizational base and clarity. They have neither a grassroots base nor a democratic allegiance, and furthermore, women's investments, contributions and risks within their cooperatives are not shared equally, making them structurally weak. We have learned that small farmer cooperatives in Jamaica are heavily dependent on government and international assistance for them to operate and survive. Their approach is self-defeating. Thus a need for a paradigm shift; for agencies to strengthen the grassroots organizational capacity in the management of cooperatives, instead of simply supplying capital and farming material which comes intermittently and only inculcates the culture of dependency in the small farming sector. From our discussions with women farmers we recognized that many women join cooperatives at the time when external assistance is available, and retreat from the cooperatives once the assistance is exhausted. For that reason the cooperative membership is a come and go scenario. Hence, agencies should focus more on building capacity of grassroots organizations for them to be sustainable, and assistance provided should be aimed at cementing sustainability rather than being a requirement for cooperative formation and operation.

The majority of women farmers in our research, and by extension in rural Jamaica, have received formal education and can read and write. This is an incentive to stimulate the organizational capacity of their cooperatives, as well as to adapt to new methods in farming, such as hillside terracing, and to adopt appropriate technologies to enhance agricultural productivity.

The sustainability of the women farmer cooperatives will highly depend on the promotion of women entrepreneurship and appropriate agro-processing technology. This is a subsector in agriculture which is still underdeveloped in Jamaica. Thus, the government should invest in basic infrastructure and introduce food processing training centers (clusters) island-wide. Such an initiative might reduce food losses (particularly fruits and vegetable) and act as an incentive for increased agricultural production.

Women entrepreneurs in collaboration with Scientific Research Council (SRC) and RADA should be a catalyst to enhance the ingenuity of women farmers in terms of expanding their farming into a more profitable venture by making various products such as castor oil, varieties of spices, wines, sauces and pickles to complement their sources of income.

Of course there are a variety of micro-ecological conditions for the growth of various crop species in rural Jamaica which might influence the setting up of diverse agro-processing and entrepreneurial centres. Special mention should be made of the castor oil industry. The community of Guys Hill produces castor oil at the household level on a very small scale. At present there is a niche market for this product. However, the community could expand by partnering with the Jamaica Bureau of Standards to gain product approval and proper packaging to make for a more uniformed distribution to a larger market. Through cooperative venture it is assumed that the quantity and quality of the product can be maintained to supply an increasing market demand.

Furthermore, another alternative to improve the involvement of women and young people in farming, and by extension farming cooperatives, is the application of new technology in the farming process. For example, we suggest that there is a need to increase the application of hydroponic and green house farming systems, which do not require large land space for its operation and guarantees high crop yield. Because these types of farming technology do not require large land space, they can be placed closer to homes and therefore significantly reduce praedial larceny. Additionally, cooperatives could be established to promote the adaptation of such highly technologically based agro systems. Also, learning clusters in conjunction with the use of Information Communications Technology (ICT) could serve the purpose of fostering networking among cooperative members.

We suggest that in order for cooperatives to be sustainable, a focus must also be placed on developing income from non-agricultural alternatives that can add on to year-long earning outside farming. For example, tailoring and hair salon activities can be promoted to increase the livelihood of rural women. Experience has demonstrated that diversifying sources of income increases agricultural productivity (Ellis 1999; Ishemo 2005). Diversification might also empower women to hire labour on a consistent basis and reduce the trend of rural to urban labour migration, as rural dwellers would be engaged in year-long diverse income generating activities. Because agriculture is a composite sector, its sustainability, and by extension the sustainability of small farming cooperatives will need to depend on multi-sectorial rural development initiatives.

Acknowledgements

The authors would like to thank Dr. Garfield Young, Dean of the Faculty of the Built Environment at University of Technology Jamaica, for his interest in our research and logistical support throughout. We also extend our deep appreciation to the Rural Agriculture Development Authority staff, Dr. Glynis Ford, Ms. Marvalee Walker, and Mr. Marlon Douglas of the Ministry of Agriculture and Fisheries, who recruited the women cooperative members for the focus group discussions, and also acted as focus group moderators. Importantly, we are indebted to the women farmers who took time to participate in our study.

References

- Anderson, P., and M. Witter. 1994. Crisis, adjustment and social change: A case study of Jamaica, in Elsie Le Franc (ed.), *Consequences of Structural Adjustment: A Review of the Jamaican Experience*, Kingston: Canoe Press.
- Arscott-Mills, S. 2001. Intimate partner violence in Jamaica. In *A Description Study of Women Who Access the Service of the Women's Crisis Centre in Kingston*, Vol. 7 No. 11 (pp. 1284-1302). Kingston, Jamaica: Sage Publishers.
- Beckford, C., and D. Campbell. 2013. *Domestic Food Production and Food Security in the Caribbean*. Pulgrave Macmillan Publishers.
- Besson, J. 1988. Agrarian relations and perceptions of land in Jamaica peasant village, in J. S. Brierly and H. Rubenstein (Eds.). *Small Farming and Peasant Resources in the Caribbean*, pp. 39-61. Manitoba Geographical Studies, no. 10. Winnipeg: University of Manitoba.
- Campbell, W. 2014. The road to 100% literacy by 2015. *The Jamaica Observer* [online] http://www.jamaicaobserver.com/columns/The-road-to-100--literacy-by-2015_17488570. Accessed 11 September 2016.
- Crawford, M. 2011. Rural women in agriculture: Jamaica network of rural women producers. *Enabling rural women's economic empowerment: Institutions, opportunities and participation*. Expert paper for expert group meeting UN women in cooperation with FAO, IFAD and WFP, Accra, Ghana.
- Critchlow, M. 1988. *Agricultural Policy and the Development of Small-holding Stratum in Jamaica, 1930-1980*. Institute of Social Studies, University of New York, Binghamton, New York.
- de Hass, H. 2007. Remittances, migration and social development: A conceptual review of the literature. Social Policy and Development Programme Paper Number 34, United Nations Research Institute for Social Development. [http://www.unrisd.org/80256B3C005BCCF9/\(httpAuxPages\)/8B7D005E37FFC77EC12573A600439846/\\$file/deHaaspaper.pdf](http://www.unrisd.org/80256B3C005BCCF9/(httpAuxPages)/8B7D005E37FFC77EC12573A600439846/$file/deHaaspaper.pdf). Accessed 16 February 2017.
- Durant-Gonzalez, V. 1985. Higglering: Rural women and the internal market system in Jamaica, in Gomes, P.L. (Ed.): *Rural Development in the Caribbean*, pp. 103-122, Heinemann Publishers, Kingston, Jamaica.
- Edwards, D. 1961. Report on an economic study of small farming in Jamaica. Kingston: Institute of Social and Economic Research, University College of the West Indies.
- Ellis, F. 1999. Rural livelihood diversity in developing countries: Evidence and policy implications. Natural Resource Perspectives, Overseas Development Institute. <https://pdfs.semanticscholar.org/6c8c/1e279da71ed5982580a2585389c9932b2549.pdf>. Accessed 12 February 2017.
- FAO. 2011. The state of food and agriculture: Women in agriculture, closing the gender gap. <http://www.fao.org/docrep/013/i2050e/i2050e.pdf>. Accessed 6 September 2016.
- Getnet, K., and T. Anullo. 2012. Agricultural cooperatives and rural livelihoods: Evidence from Ethiopia. *Annals of Public and Cooperative Economics*, Vol. 83, No. 2 pp. 181-198.
- GOJ. 2011. Development of Cooperative Movements in Jamaica. <http://cooperative.gov.dm/index.php/about/1-history>. Accessed 5 September 2016.

- Griffith, D. 1998. Labour Migration and Changing Peasant Agriculture in Jamaica, in Brierly, J.S. and H. Rubenstein. (Eds): *Small Farming and Peasant resources in the Caribbean*, pp. 101-117, Manitoba Geographical Studies No.10, University of Manitoba, Winnipeg.
- Haniff, N. 1998. Male violence against men and women in the Caribbean: The case of Jamaica. *Journal of Comparative Family Studies*, Vol. 29, No. 2.
- IFAD Report. 2011. *Women and rural development: Enabling poor and rural people to overcome poverty*. <https://www.ifad.org/documents/10180/e1e0d0da-c59a-4ee8-a5dd-2825a9528003>. Accessed 12 February 2017.
- IICA Report. 2007. IICA's contribution to agricultural and the development of the rural communities in Jamaica. <http://repiica.iica.int/docs/B0775i/B0775i.PDF>. Accessed 15 September 2016.
- Ishemo, A. 2005. Population mobility and the sustainability of farming households: The Rio Grande Valley, Jamaica. Unpublished PhD. Dissertation, University of the West Indies, Mona.
- Ishemo, A., Semple, H., and E. Thomas-Hope. 2006. Population mobility and the survival of small farming in the Rio Grande Valley, Jamaica. *The Geographical Journal*, Vol. 172, No. 4, pp. 318-330.
- Le Franc, E. 1996. *Women of the Sexual Division of Labour in the Caribbean*. Institute of Social and Economic Research, University of the West Indies (Mona).
- Mandle, J. 1996. *Persistent Underdevelopment: Change and economic modernization in the West Indies*. Taylor and Francis Publishers.
- Massiah, J. 1986. Women in the Caribbean. *Social and Economic Studies*, Vol. 35, No. 243, pp. 87-103, University of the West Indies, Jamaica.
- Momsen, J. 1987. Land settlement as an imposed solution. In Besson, J. and J Momsen, (Eds.), *Land and Development in the Caribbean*, pp. 46-69. Warwick University Caribbean Studies, London: Macmillan Publishers.
- Momsen, J. 1988. Changing gender roles in Caribbean agriculture, in Brierly, J.S. and Momsen, J. 1993. Introduction, in Momsen, J. (Ed.): *Women and Change in the Caribbean*, pp. 1-11, Kingston: Ian Randle.
- Momsen, J. 1998. Gender ideology and land, in Barrow, C. (Ed.). *Caribbean portrait: Essays on gender ideologies and identities*, pp. 115-132, Ian Randle: Kingston.
- Njoku, M., Ugochukwu, A., I., and B. Chendo. 2003. Performance evaluation of women farmer cooperative societies in Owerri agricultural zone of Imo state, Nigeria. *The Journal of Agriculture and Social Research (JASR)*, Vol. 3, No. 2, pp. 97-107.
- Pickard, J. G. 1991. Jamaica: Land issues in the urban sector: An overview of selected structural problems and issues. Report by the U.S. Agency for International Development, Kingston Jamaica.
- RADA. 2009. Annual report on the support from the Rural Agriculture Development Authority. http://www.japarliament.gov.jm/attachments/article/798/798_Ministry_Paper___4_,2012.pdf. Accessed 10 September 2016.
- Samms, M. and B. Cholewa. 2014. Exploring the context of child sexual abuse in Jamaica: Addressing the deficits. *Journal of Child Sexual Abuse*, Vol 23. pp 115-127, Taylor & Francis Publishers.
- Smith, R. 1996. *Matrifocal Family Pluralism and Politics*. New York: Routledge Publishers.
- UNESCO Index for Statistics. 2010. <http://www.indexmundi.com/facts/jamaica/literacy-rate>. Accessed 5 September 2016.

- Vincent, K. 2007. Uncertainty in adaptive capacity and the importance of scale. *Global Environment Change*, 2007, Vol. 17. No. 1, pp 12-24.
- Weis, T. 2001. Contradictions and change in Jamaica: The theorizing ecosocial resistance amidst ecological crisis. *Capitalism, Nature, Socialism Journal*, Vol. 12 No. 2, pp. 85-131.
- Weis, T. 2006. The rise, fall and future of the Jamaican peasantry. *The Journal of Peasant Studies*, Vol. 33, No. 1, pp. 61-88.